# Pre-Calc/ Col. Prep. Math Lesson Plans Week 5 

Teacher: Ngoma Botumile A
Week of: 09/19-9/23/2016

Subject: Pre Calc. \& Col. Prep. Math

Grade: 11 \& 12

## Day/Date: Tuesday,09/20/2016

Unit 1: Values of Trigonometric Functions
Students determine the relationships among the unit circle, trigonometric functions, and trigonometric values when given measures in degrees, minutes, and seconds or radians based on the unit circle.

Today's Objective: Review Week: Students will review the TEKS, assignments, notes, solve problems and catch-up on work we have done the last 4 Week by working in their table teams.

## D. E. A. R: 7:40am -8:00am

1) As required school wide, points will be lost for lack of participation. See your D.E.A.R. download for this week.
2) No points for tardy students during
D.E.A.R.

Warm-up: From warm-up table download

## Agenda:

1. Warm-up Solution
2. Check downloads week 5
3. Dropbox folder online
4. Start your review of the last 4 Weeks, Including Notes, binder, Videos, Quizzes, etc.
5. Early dismissal Wednesday.
6. Make a Vocabulary list of the last 4 wks
7. Saturday tutorials $9: 30$ am to $12: 30 \mathrm{pm}$

Homework: HOW\#5 and POW \#5. Due
Friday @ 11:59pm.
Evaluation/Exit Ticket: 5-Minutes Summary of what you have learned today. (1-minutes discussion and 4-minutes writing at level-0 voices)

## TEKS:

Process Standards, PC.1A, PC.1B, PC.1C, PC.1D, PC.1E, PC.1F, PC.1G, PC.2P, PC.4A, PC.4B, PC.4C, PC.4E. (List of TEKS details is posted above the board.)

ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, \& C.2H (ELPS detail descriptions are posted in Class)

## Vocabulary:

Minutes
Trig identity
Special angles
Unit circle Attributes
Essential Understanding/Guiding Questions:

1. How does the six trig functions relate?
2. What are attributes of a Unit circle?
3. Even and odd functions pp 80.

Day/Date: Thursday: 9/22/2016

## Unit 1: Values of Trigonometric Functions

Students determine the relationships among the unit circle, trigonometric functions, and trigonometric values when given measures in degrees, minutes, and seconds or radians based on the unit circle.

## Continue from Tuesday:

Today's Objective: Review Week: Students will review the TEKS, assignments, notes, solve problems and catch-up on work we have done the last 4 Week by working in their table teams.

## D. E. A. R: 7:40am -8:00am

1) As required school wide, points will be lost for lack of participation. See your D.E.A.R. download for this week.
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D.E.A.R.

Warm-up: From warm-up table download

## Agenda:

1. Warm-up Solution
2. Dropbox folder online
3. Start your review of the last 4 Weeks, Including Notes, binder, Videos, Quizzes, etc.
4. Make a Vocabulary list of the last 4 wks
5. Saturday tutorials $9: 30$ am to $12: 30 \mathrm{pm}$

Homework: HOW\#5 and POW \#5. Due
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## TEKS:

Process Standards, PC.1A, PC.1B, PC.1C, PC.1D, PC.1E, PC.1F, PC.1G, PC.2P, PC.4A, PC.4B, PC.4C, PC.4E. (List of TEKS details is posted above the board.)

ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, \& C.2H ( ELPS detail descriptions are posted in Class)

## Vocabulary:

Trigonometric Functions inverse verses
reciprocals.
Even function
Odd function.

## Essential Understanding/Guiding Questions:

1. Which of the trig functions are even?
2. How are special right triangle connected to trigonometry?
3. How does degrees and $\pi$, relate?

## Unit 1: Values of Trigonometric Functions

Students determine the relationships among the unit circle, trigonometric functions, and trigonometric values when given measures in degrees, minutes, and seconds or radians based on the unit circle.

Today's Objective: Major Quiz week \#5:
Modified version week 4 Major Quiz + one extra problem from week 5 , Test grade.

## D. E. A. R: 7:40am -8:00am

1) As required school wide, points will be lost for lack of participation. See your D.E.A.R. download for this week.
2) No points for tardy students during D.E.A.R.

Warm-up: Start major quiz

## Agenda:

1. Start Major Quiz all Pd
2. Saturday tutorials 9:30 am to $12: 30 \mathrm{pm}$

Homework: Study and complete downloads Monday by 7:30am. Read your downloads before first day of the class for this week.

Evaluation/Exit Ticket: 5-Minutes
Summary of what you have learned today. (1-minutes discussion and 4-minutes writing at level-0 voices)

## TEKS:

Process Standards, PC.1A, PC.1B, PC.1C, PC.1D, PC.1E, PC.1F, PC.1G, PC.2P, PC.4A, PC.4B, PC.4C, PC.4E. (List of TEKS details is posted above the board.)

ELPS: : C.3D, C.3H, C.3E, C.5G, C.1E, \& C.2H ( ELPS detail descriptions are posted in Class)

Vocabulary:

Essential Understanding/Guiding Questions:

## Pre-Calc. TEKS

Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:
PC.1A Apply mathematics to problems arising in everyday life, society, and the workplace.
PC.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.
PC.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
PC.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
PC.1E Create and use representations to organize, record, and communicate mathematical ideas.
PC.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
PC.1G Display, explain, or justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

PC.2P Determine the values of the trigonometric functions at the special angles and relate them in mathematical and real-world problems.

PC.4A Determine the relationship between the unit circle and the definition of a periodic function to evaluate trigonometric functions in mathematical and real-world problems.
PC.4B Describe the relationship between degree and radian measure on the unit circle.
PC.4C Represent angles in radians or degrees based on the concept of rotation and find the measure of reference angles and angles in standard position.
PC.4E Determine the value of trigonometric ratios of angles and solve problems involving trigonometric ratios in mathematical and real-world problems.

